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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,971	07/10/2000	Jae-seong Shim	1293.1128/MJB	9406

21171 7590 02/10/2003

STAAS & HALSEY LLP
700 11TH STREET, NW
SUITE 500
WASHINGTON, DC 20001

EXAMINER

TU, CHRISTINE TRINH LE

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 02/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/612,971

Applicant(s)

SHIM ET AL.

Examiner

Christine T. Tu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 15-34 is/are rejected.
- 7) ☒ Claim(s) 10-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 29-34 are again rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claim invention is recited with data (which is an error correction block structure) embodied on a computer readable medium (which is an optical disk). However, the data does not provide functionality to either the data as claimed or to the optical disk. As such, the claimed invention is recited with non-functional descriptive material, i.e., mere data. Non-functional descriptive material stored on a computer readable medium is merely carried on the medium, it is not structurally and functionally interrelated to the medium.

3. Claims 1-9, 15-16, 18-27 and 29-34 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (6,252,383 and Kuroda hereinafter).

Claims 1-9, 15-16, 18-27 and 29-34:

The rationale for rejecting these claims is again the same as it was set forth in paragraph 7 of the previous office action which was mailed on September 27, 2002.

4. Claim 17 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (6,252,838 and Kuroda hereinafter) in view of Ozaki et al. (4,719,628).

Claim 17:

The rationale for rejecting these claims is again the same as it was set forth in paragraph 8 of the previous office action which was mailed on September 27, 2002.

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5. Claim 28 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (6,252,838 and Kuroda hereinafter) in view of Hoshino (5,586,108).

Claim 28:

The rationale for rejecting these claims is again the same as it was set forth in paragraph 9 of the previous office action which was mailed on September 27, 2002.

6. Applicant's arguments filed December 27, 2002 have been fully considered but they are not persuasive.

Applicant argues that the amendment for claims 29-34 overcomes the 35 U.S.C. 101 rejection. Examiner, however, disagrees against applicant's remark. The applicant is requested to review MPEP 2106(IV)(B)(1), which discusses nonstatutory subject matter. This section states '... "Nonfunctional descriptive material" includes but is not limited to ... a compilation or mere arrangement of data.' and '... When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory.' Moreover, in MPEP 2106(IV)(B)(1)(b) states that "Descriptive material that cannot exhibit any functional interrelationship with the way in which computer processes are performed does not constitute a statutory process... and should be rejected under 35 U.S.C. 101" and "Where certain types of descriptive material such as ... mere arrangements ... of ... data are merely stored so as to be read or outputted by a computer with creating any function interrelationship...".

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Base on Claim 29, what is being claimed is "... an error correction block structure encoded on the optical disk comprising: a plurality of inner parity blocks, each said inner parity block comprising an e-byte ... in an inner parity direction; and a plurality of f-byte outer parities in an outer parity direction". Firstly, applicant should noted that the recited "error correction block structure" is being encoded. In other words, the error correction block itself does not provide any encoding function. Therefore, The recited "error correction block structure" is merely nonfunctional descriptive material and being arranged on the optical disk. Thus The claimed invention is not applicable to MPEP 2106(IV)(B)(1)(a). As the result claims 29-34 are directed to non-statutory subject matter.

Applicant argues that the present invention can still correct burst errors even with the small spot size in an HD-DVD whereas Kuroda cannot. Examiner, however, respectfully traverses applicant's remark. No limitation of "burst errors can be corrected even with the small spot size in an HD-DVD" is being recited. Based on claims 29 and 32-34, what is being recited is "A optical disk comprising an error correction block structure encoded on the optical disk" and "wherein the optical disk is a DVD" and "wherein the DVD is HD-DVD". In other words, only error correction block structure encoded on the HD-DVD is being recited. NO ACTUAL error correction is being performed yet in the claim limitation.

Applicant argues that no specific feature of interleaving of data groups and the direction of the interleaving is taught by Kuroda. In fact, Kuroda does teaches such limitation. Kuroda teaches that a certain one of the correction block (34) (each totally having the data of 182 bytes

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including the ECC internal codes 31 for one line) in being interleaved. In others words, the last correction block (D207.0, D207.1, ... D207.171, D207.172 ... D207.181) of Kuroda would have comprising PO and PI codes (figure 1B, column 6 lines 34-46).

7. Claims 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. L. Tu whose telephone number is (703) 305-9689. The examiner can normally be reached on Monday to Thursday from 8:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady, can be reached on (703) 305-9595.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

10. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7238 (for formal after-final communications intended for entry),
(703) 746-7239 (for formal communications intended for entry),

Or:

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(703) 746-7240 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA. 22202, Sixth Floor (Receptionist).

A handwritten signature in black ink, appearing to read "Christine T. L. Tu". The signature is fluid and cursive, with a large, stylized "T" at the end.

Christine T. L. Tu
Primary Patent Examiner
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February 8, 2003